

What Is Claimed Is:

1. A print substrate-contacting element comprising:
a microstructured carrier having a surface; and
an ink-repellent coating on the surface of the microstructured carrier, the ink-repellent coating including a derivative of an amphiphilic organic compound having a polar region with an acidic character.
2. The print substrate-contacting element as recited in claim 1 wherein the carrier is metallic and has a natively oxidized surface.
3. The print substrate-contacting element as recited in claim 1 wherein the carrier has at least one substance selected from the group consisting of titanium, zirconium, molybdenum, nickel, copper, aluminum, chromium, iron, silver and gold.
4. The print substrate-contacting element as recited in claim 1 wherein the derivative of an amphiphilic organic compound is a hydroxamic acid derivative or a phosphonic acid derivative.
5. The print substrate-contacting element as recited in claim 1 wherein the derivative of the amphiphilic organic compound is substituted in a nonpolar region so as to be both ink-repellent and water-repellent.
6. The print substrate-contacting element as recited in claim 1 wherein the derivative of the amphiphilic organic compound is fluorinated in a nonpolar region.
7. The print substrate-contacting element as recited in claim 1 wherein the print substrate-contacting element is a back-pressure cylinder or a part of a surface thereof.
8. A print substrate-processing machine comprising at least one print substrate-contacting element as recited in claim 1.
9. The print substrate processing machine as recited in claim 8 wherein the machine is a printing press.

10. A method for coating a surface of a microstructured carrier of a print substrate-contacting element, the method comprising the step of:

applying an amount of a substance including at least one derivative of an amphiphilic organic compound having a polar region with an acidic character by treating the surface with an aqueous or alcoholic solution of the amount of the substance.

11. The method as recited in claim 10 further comprising cleaning the treated surface with an organic solvent, non-adherent parts of the quantity of substance being soluble in the organic solvent.

12. The method as recited in claim 10 further comprising drying the treated surface using an anhydrous process gas.

13. The method as recited in claim 10 further comprising precleaning the surface of the microstructured carrier prior to the treating with the aqueous or alcoholic solution of the quantity of substance by wetting the surface with an organic solvent.

14. The method as recited in claim 10 further comprising conditioning the surface prior to the treating with the alcoholic solution of the quantity of substance by irradiating the surface.

15. A method for operating a print substrate-processing machine comprising the step of:
coating a surface of a microstructured carrier of a print substrate-contacting element of the machine, the coating step including applying an amount of a substance including at least one derivative of an amphiphilic organic compound having a polar region with an acidic character by treating the surface with an aqueous or alcoholic solution of the amount of the substance.

16. The method as recited in claim 15 further comprising contacting a print substrate with the surface.

17. The method as recited in claim 15 further comprising inspecting whether the printing substrate contacting element is ink repellent or not.